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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/529,935

12/19/2005

Gilles Cantin

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23718

7590

11/28/2007

SCHLUMBERGER OILFIELD SERVICES

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MD 200-9

SUGAR LAND, TX 77478

EXAMINER

WRIGHT, GIOVANNA COLLINS

ART UNIT

PAPER NUMBER

3672

MAIL DATE

DELIVERY MODE

11/28/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/529,935	<b>Applicant(s)</b> CANTIN ET AL.	
	<b>Examiner</b> Giovanna C. Wright	<b>Art Unit</b> 3672	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 31 August 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-19 and 21-23 is/are pending in the application.
- 4a) Of the above claim(s) 20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19, 21 and 23 is/are rejected.
- 7) ☒ Claim(s) 17 and 22 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 March 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 12-13, 16, 18, 19 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Malone 6328112.

Referring to claims 12 and 16, Malone discloses ( fig. 10a) a device for control of the flow through a production tube placed in an oil well, the device comprising a portion of the production tube (510) provided with through orifice and a protection system comprising add-on sector ( 506) assembled around the portion of the tube such that the sector form a protective envelope surrounding the tube, each add-on sector having one opening (502) and a sliding sleeve (504) that is capable of sliding on the sector to close the opening. Malone does not disclose several orifices, several sectors, an inner stiffener and providing the device with resistance to erosion. In the embodiment shown in fig. 4a, Malone discloses that a tubular can have several orifices with several sectors ( 114) in the orifices. Malone also discloses the sector has an inner stiffener (section of element 114 that is inside the orifice of element 170) and that the devices can be made to provide resistance to erosion ( col. 4, line 51-col. 5, line 8). As it would be advantageous to properly control the flow through the tube, help align and keep the sectors in place in the tube and extend the life of the device, it would be obvious to one

of ordinary skill in the art at the time of the invention to modify the device disclosed by Malone to have several orifices and sectors, an inner stiffener and erosion protection.

Referring to claim 13, Malone discloses the sectors ( 506) for a protective envelope surrounding an external surface of the tube.

Referring to claim 18, Malone discloses a sector ( 114) and inner stiffener ( section of element 114 inside of orifice of element 170) are superposed and is approximately the shape of an annular portion.

Referring to claims 19 Malone disclose a shape of the inner stiffener ( section of element 114 inside of element 170) is complementary to a shape of the through orifice where it is located.

Referring to claim 21, Malone discloses the sectors can be made from tungsten ( col. 4, line 51-col. 5, line 8).

3. Claims 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Malone 6328112 in view of Sipler 405293.

Malone does not disclose a clamping ring. Sipler teaches (fig. 1) clamping rings ( 20) help to hold sections together. As it would be advantageous to ensure the sector stays attached to the tubular, it would be obvious to one of ordinary skill in the art at the time of the invention to modify the device disclosed by Malone to have two clamping rings in view of the teachings of Sipler.

Referring to claim 15, Malone does not disclose an upper and lower groove on the sector. Sipler teaches that having upper and lower grooves help to keep clamping

rings in position ( see groove at 20 in fig. 1). As it would be advantageous to help in ensure the clamping rings stay in place, it would be obvious to one of ordinary skill in the art at the time of the invention to modify the device disclosed by Malone to have upper and lower grooves on the section in view of the teachings of Sipler.

Referring to claim 23, Malone discloses ( fig. 10a) a device for control of the flow through a production tube placed in an oil well, the device comprising a portion of the production tube (510) provided with through orifice and a protection system comprising add-on sector ( 506) assembled around the portion of the tube such that the sector form a protective envelope surrounding the tube, each add-on sector having one opening (502) and a sliding sleeve (504) that is capable of sliding on the sector to close the opening. Malone does not disclose several orifices, several sectors, an inner stiffener, providing the device with resistance to erosion and a clamping system. In the embodiment shown in fig. 4a, Malone discloses that a tubular can have several orifices with several sectors ( 114) in the orifices. Malone also discloses the sector has an inner stiffener (section of element 114 that is inside the orifice of element 170) and that the devices can be made to provide resistance to erosion ( col. 4, line 51-col. 5, line 8). Wood teaches (fig. 1) clamping rings ( 20) help to hold sections together. As it would be advantageous to properly control the flow through the tube, help align and keep the sectors in place in the tube, extend the life of the device and to ensure the sector stays attached to the tubular, it would be obvious to one of ordinary skill in the art at the time of the invention to modify the device disclosed by Malone to have several orifices and

sectors, an inner stiffener and erosion protection and a clamping system in view of the teaches of other embodiments of Malone and Sipler.

***Allowable Subject Matter***

4. Claims 17 and 22 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

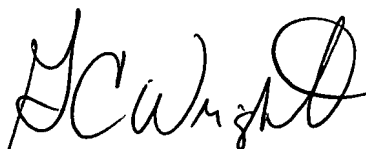
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Giovanna C. Wright whose telephone number is 571-272-7027. The examiner can normally be reached on 7:30-4 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David J. Bagnell can be reached on 571-272-6999. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



**Giovanna Collins Wright**  
**Patent Examiner**  
**Technology Center 3670**